AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1 - 18. (canceled)

19. (previously presented) A method of fabricating a light-emitting device which comprises a transparent conductive semiconductor substrate, and a light-emitting layer portion composed of a compound semiconductor and bonded on one main surface of the transparent conductive semiconductor substrate while placing a substrate-bonding conductive oxide layer composed of a conductive oxide in between; and further comprises a contact layer for reducing junction resistance of the substrate-bonding conductive oxide layer, disposed between the light-emitting layer portion and the substrate-bonding conductive oxide layer so as to contact with the substrate-bonding conductive oxide layer; comprising:

a light-emitting layer portion growth step for epitaxially growing the light-emitting layer portion composed of a compound semiconductor on a first main surface of a light-emitting-layer-growing substrate;

a contact layer forming step for forming a layer for becoming the contact layer for reducing junction resistance with the substrate-bonding conductive oxide layer;

a substrate-bonding conductive oxide layer forming step for forming the substrate-bonding conductive oxide layer on the bonding surface side of the light-emitting layer portion and/or the transparent conductive semiconductor substrate;

a bonding step for bonding the light-emitting layer portion and the transparent conductive semiconductor substrate while placing the substrate-bonding conductive oxide layer in between, to thereby produce a substrate bond in which the layer for becoming the contact layer is disposed so as to contact with the substrate-bonding conductive oxide layer; and

a separating step for separating the light-emitting-layer-growing substrate from the substrate bond.

20. (previously presented) The method of fabricating a light-emitting device as claimed in Claim 19, wherein in the contact layer forming step, a GaAs layer is formed as the layer for becoming the contact layer, an ITO layer as the substrate-bonding conductive oxide layer is then formed so as to contact with the GaAs layer, and the layers are annealed so as to diffuse indium from the ITO layer into the GaAs layer to thereby form the contact layer as an indium-containing GaAs layer.

21. (previously presented) A method of fabricating a light-emitting device which comprises a transparent conductive semiconductor substrate, and a light-emitting layer portion composed of a compound semiconductor and bonded on one main surface of the transparent conductive semiconductor substrate while placing a substrate-bonding conductive oxide layer composed of a conductive oxide in between; comprising:

a light-emitting layer portion growth step for epitaxially growing the light-emitting layer portion composed of a compound semiconductor on a first main surface of a light-emitting-layer-growing substrate;

a substrate-bonding conductive oxide layer forming step for forming by sputtering an amorphous substrate-bonding conductive oxide layer on the bonding surface side of the light-emitting layer portion and/or the transparent conductive semiconductor substrate;

a bonding step for bonding the light-emitting layer portion and the transparent conductive semiconductor substrate while placing the substrate-bonding conductive oxide layer in between, to thereby produce a substrate bond; and

a separating step for separating the light-emitting-layer-growing substrate from the substrate bond.

22. (previously presented) A method of fabricating a light-emitting device comprising:

a light-emitting layer portion growth step for epitaxially growing the light-emitting layer portion composed of a compound semiconductor on a main surface of a light-emitting-layer-growing substrate;

a separating step for separating the light-emitting-layer-growing substrate from the light-emitting layer portion;

a transparent conductive oxide layer forming step for covering a separation-side main surface, which is defined as the main surface on the light-emitting layer portion side exposed after the separation of the light-emitting-layer-growing substrate, with a transparent conductive oxide layer also available as a transparent electrode for applying voltage to the light-emitting layer portion; and

a contact layer forming step for forming a layer for becoming a contact layer for reducing junction resistance of the transparent conductive oxide layer on the separation-side main surface prior to the transparent conductive oxide layer forming step.

23. (original) The method of fabricating a light-emitting device as claimed in Claim 22, further comprising a bonding step for producing a substrate bond by bonding a conductive substrate to the light-emitting layer portion on the main surface thereof opposite to that contacting with the light-emitting-layer-growing substrate.

24. (original) The method of fabricating a light-emitting device as claimed in Claim 23, wherein the conductive substrate is bonded to the light-emitting layer portion while placing a metal layer intended for a reflective layer in between.

25. (original) The method of fabricating a light-emitting device as claimed in Claim 24, wherein the conductive substrate is an Si substrate or a metal substrate.

26. (original) The method of fabricating a light-emitting device as claimed in Claim 24, wherein the reflective layer is an Au-base metal layer.

27. (original) The method of fabricating a light-emitting device as claimed in Claim 24, wherein the conductive layer is an Si substrate, the reflective layer is an Au-base metal layer contacting with both of the light-emitting layer portion and the Si substrate, and the Si substrate is bonded to the light-emitting layer portion while placing the Au-base metal layer in contact with the Si substrate in between by bonding annealing at 80°C to 360°C, both ends inclusive.

28. (original) The method of fabricating a light-emitting device as claimed in Claim 27, wherein after the bonding

annealing, the transparent conductive oxide layer is grown by sputtering on the separation-side main surface of the transparent conductive oxide layer.

29. (original) The method of fabricating a light-emitting device as claimed in Claim 28, wherein the transparent conductive oxide layer is formed as an amorphous oxide layer.

30. (original) The method of fabricating a light-emitting device as claimed in Claim 22, wherein the transparent conductive oxide layer is an ITO layer.

31. (currently amended) The method of fabricating a light-emitting device as claimed in Claim 22, wherein a GaAs layer is formed as the layer intended for becoming the contact layer, an ITO layer as the transparent conductive oxide layer is then formed so as to contact with the GaAs layer, and the layers are annealed so as to diffuse ~~In~~ indium from the ITO layer into the GaAs layer to thereby form the contact layer as an In-containing GaAs layer.

32. (currently amended) The method of fabricating a light-emitting device as claimed in Claim 31, wherein the conductive substrate is an Si substrate, the Si substrate is then bonded to the light-emitting layer portion while placing an Au-base metal

layer in contact with the Si substrate in between by bonding annealing at 80°C to 360°C, both ends inclusive, and thereafter the annealing for diffusing ~~In~~ indium into the GaAs layer is carried out.

33. (currently amended) The method of fabricating a light-emitting device as claimed in Claim 32, wherein the annealing for diffusing ~~In~~ indium into the GaAs layer is carried out at 600°C to 750°C, both ends inclusive, for 5 seconds to 120 seconds, both ends inclusive.

34 - 48. (canceled)

49. (previously presented) A method of fabricating a light-emitting device comprising:

a light-emitting layer portion growth step for epitaxially growing the light-emitting layer portion composed of a compound semiconductor on a light-emitting-layer-growing substrate;

a metal layer forming step for forming a metal layer on a first main surface side of a conductive substrate;

a bonding-use transparent conductive oxide layer forming step for forming a bonding-use transparent conductive oxide layer on the first main surface side of the light-emitting layer portion; and

a bonding step for bonding the conductive substrate and the

light-emitting layer portion so as to allow the metal layer to contact with the bonding-use transparent conductive oxide layer,

where all steps are sequentially carried out in this order.

50. (original) The method of fabricating a light-emitting device as claimed in Claim 49, wherein the bonding step is responsible for bonding between the bonding-use transparent conductive oxide layer and the metal layer.

51. (original) The method of fabricating a light-emitting device as claimed in Claim 49, wherein, after the bonding, a portion of the metal layer in contact with the bonding-use transparent conductive oxide layer is composed of an Au-base metal layer.

52. (original) The method of fabricating a light-emitting device as claimed in Claim 51, wherein the bonding-use transparent conductive oxide layer is an ITO layer, and the portion of the metal layer in contact with the bonding-use transparent conductive oxide layer is an Sn-containing, Au-base metal layer.

53. (original) The method of fabricating a light-emitting device as claimed in Claim 49, wherein the conductive substrate is an Si substrate, and the Si substrate is bonded to the light-

emitting layer portion while placing the Au-base metal layer in contact with the Si substrate in between by bonding annealing at 80°C to 360°C, both ends inclusive.

54. (original) The method of fabricating a light-emitting device as claimed in Claim 49, further comprising a contact layer forming step for forming a contact layer for reducing junction resistance of the bonding-use transparent conductive oxide layer on the first main surface side of the light-emitting layer portion prior to the bonding-use transparent conductive oxide layer forming step.

55. (previously presented) The method of fabricating a light-emitting device as claimed in Claim 49, wherein, prior to the formation of the bonding-use transparent conductive oxide layer, a GaAs layer is formed on the first main surface side of the light-emitting layer portion, an ITO layer as the bonding-use transparent conductive oxide layer is then formed so as to contact with the GaAs layer, and the layers are annealed so as to diffuse indium from the ITO layer into the GaAs layer to thereby form the contact layer composed of indium-containing GaAs.

56. (original) The method of fabricating a light-emitting device as claimed in Claim 55, wherein the conductive substrate is an Si substrate, the Si substrate is then bonded to the light-

emitting layer portion while placing an Au-base metal layer in contact with the Si substrate in between by bonding annealing at 80°C to 360°C, both ends inclusive, and thereafter the annealing for diffusing In into the GaAs is carried out.

57. (previously presented) The method of fabricating a light-emitting device as claimed in Claim 56, wherein the annealing for diffusing indium into the GaAs layer is carried out at 600°C to 750°C, both ends inclusive, for 5 seconds to 120 seconds, both ends inclusive.

58 - 79. (canceled)

80. (original) A method of fabricating a light-emitting device which comprises a compound semiconductor layer having a light-emitting layer portion, of which first main surface being used as a light extraction surface, and a device substrate bonded to the second main surface side of the compound semiconductor layer while placing a main metal layer having a reflective surface for reflecting light from the light-emitting layer portion towards the light extraction surface side; comprising the steps of:

forming a diffusion-blocking layer, which is composed of an inorganic conductive material, and is provided for blocking diffusion of components derived from the device substrate into the main metal layer, on the surface of the device substrate on

the side to which the compound semiconductor layer is to be bonded;

forming the main metal layer on at least either one of the second main surface of the compound semiconductor layer, and the main surface of the diffusion-blocking layer formed on the device substrate; and

thereafter bonding the device substrate and the compound semiconductor while placing the diffusion-blocking layer and the main metal layer in between.

81. (currently amended) The method of fabricating a light-emitting device as claimed in Claim 80, wherein the device substrate and the compound semiconductor layer are stacked while placing the diffusion-blocking layer and the main ~~meta~~ metal layer in between, and subjected to bond annealing in this status to thereby bond the device substrate and the compound semiconductor layer.

82. (currently amended) The method of fabricating a light-emitting device as claimed in Claim 80, wherein the diffusion ~~locking~~ blocking layer is composed of a conductive oxide.

83. (original) The method of fabricating a light-emitting device as claimed in Claim 82, wherein the conductive oxide is ITO.

84. (original) The method of fabricating a light-emitting device as claimed in Claim 83, wherein the thickness of the diffusion-blocking layer is 1 nm to 10 μm, both ends inclusive.

85. (original) The method of fabricating a light-emitting device as claimed in Claim 80, wherein a substrate-side bonding metal layer for reducing junction resistance between the device substrate and the diffusion-blocking layer is formed in on the main surface of the device substrate, and the diffusion-blocking layer is formed on the substrate-side bonding metal layer.

86. (original) The method of fabricating a light-emitting device as claimed in Claim 80, wherein the main metal layer is composed of an Au-base layer containing Au as a major component at least at the portion thereof including the interface with the diffusion-blocking layer, and the device substrate is an Si substrate.

87. (original) The method of fabricating a light-emitting device as claimed in Claim 86, wherein the device substrate is an n-type Si substrate, and further comprises a substrate-side bonding metal layer which is composed of an AuSb alloy or an AuSn alloy, and is provided for reducing junction resistance between the Si substrate and the diffusion-blocking layer, interposed

between the diffusion-blocking layer and the Si substrate.

88. (currently amended) The method of fabricating a light-emitting device as claimed in Claim 80, further comprising the steps of:

disposing a first Au-base layer for becoming the main metal layer and containing Au as a major component on a bonding-side surface of the compound semiconductor layer, where the bonding-side surface is the main surface of the compound semiconductor layer opposite to that serves as the light extraction surface;

disposing a second Au-base layer for becoming the main metal layer and containing Au as a major component on a bonding-side surface of the device substrate, where the bonding-side surface ~~being assumed as~~ is the main surface of the device substrate ~~intended~~ for being located on the light-emitting layer portion side; and

bonding the first Au-base layer and the second Au-base layer under close contact.

89. (original) The method of fabricating a light-emitting device as claimed in Claim 88, wherein an Si substrate is used as the device substrate.

90. (original) The method of fabricating a light-emitting device as claimed in Claim 88, wherein the reflective layer is formed by the first Au-base layer.